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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/805,577 | 03/19/2004 | Toshihiko Nisimura | 03886/0201062-US0 | 9258 |
| 7278 | 7590 | 07/26/2005 | EXAMINER | |
| DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257 | | | JENKINS, JERMAINE L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2855 | |

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,577

Applicant(s)

NISIMURA, TOSHIHIKO

Examiner

Jermaine Jenkins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03192004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kadota (5,625,143).

In regards claim 1, Kadota teaches an internal combustion engine having a means for detecting a fluctuation of engine speeds (i.e. determining variations in rotational speed) of the engine following a change of engine operating conditions and for calculating a diagnosis value (i.e. misfire) based on the fluctuation (Column 1, lines

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6-10), and means for comparing the diagnosis value (i.e. misfire) with a threshold value (i.e. reference values) (Column 2, lines 38-53) and for judging that a failure occurs in the valve timing control system in case where the diagnosis value exceeds the threshold value (Column 1, line 37 – Column 2, line 5; See Figures 7 & 8).

With respect to claim 2, Kadota teaches wherein the diagnosis value (i.e. misfire) is an integral value of the fluctuations of the engine speeds (Column 2, lines 38-53).

In regards to claim 3, Kadota teaches an internal combustion engine having a means for detecting a fluctuation of engine speeds following a change of engine operating conditions and for calculating an elapsed time (i.e. period T) until the fluctuation converges and means for judging that a failure occurs in the valve timing control system in case where the elapsed time exceeds a preestablished time (Column 1, line 37 – Column 2, line 21; See Figure 8 & 9).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent 6,868,812 (Saito et al) – Valve Timing Control System for Internal Combustion Engine
- U.S. Patent 6,840,235 (Koseki et al) – Internal Exhaust Gas Recirculation Amount Estimation System of Internal Combustion Engines
- U.S. Patent 6,752,128 (Ozeki et al) – Intake System Failure Detecting Device and Method for Engines

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- U.S. Patent 6,349,592 (Hirasawa et al) – Intake Air Quality Calculating Apparatus for an Internal Combustion Engine with a Variable Valve Timing Control Mechanism
- U.S. Patent 6,006,707 (Ito) – Valve Timing Control Apparatus for an Internal Combustion Engine
- U.S. Patent 5,033,290 (Seki et al) – Method of Detecting Failure of Valve Timing Changeover Control System of an Internal Combustion Engine

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermaine Jenkins whose telephone number is 571-272-2179. The examiner can normally be reached on Monday-Thursday 7am-530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jermaine Jenkins
A.U. 2855


EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800